TESTIMONY
OF

PETER LOCHERY
WATER TEAM LEADER
CARE

BEFORE THE
U.S. HOUSE OF REPRESENTATIVES
COMMITTEE ON INTERNATIONAL RELATIONS

HEARING ON
THE GLOBAL WATER CRISIS:
EVALUATING U.S. STRATEGIES TO ENHANCE
ACCESS TO SAFE WATER AND SANITATION

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Mr. Chairman, Ranking Member Lantos and members of the Committee, my name is Peter Lochery. I am CARE's Water Team Leader. I am also a Board member of three small non-profits: Building Partnerships for Development in Water and Sanitation, the Millennium Water Alliance, and Water Advocates. Thank you for the opportunity to present testimony this morning on behalf of CARE and for your leadership in taking up this critical issue.

My testimony will describe CARE's perspective on the global water crisis including the linkages between safe water and sanitation and other areas of development, the role of non-governmental organizations in helping to ameliorate water challenges in developing countries, and our views on H.R. 1973, the "Water for the Poor Act of 2005".

1. CARE

CARE was founded in 1946 to assist in the post-war reconstruction of Europe. Today CARE is one of the world's largest relief and development organizations, and is dedicated to ending poverty. CARE carries out a wide variety of programs in the areas of agriculture and natural resources, basic and girls' education, health (including reproductive health, children's health, and water, sanitation and environmental health), and small economic activity development.

CARE has implemented water and sanitation activities for forty-eight years, reaching over 10 million people in 20,000 communities in more than 40 countries, through an investment of over $350 million. CARE's current portfolio includes over 100 projects with significant water activities in 39 countries in Africa, Asia, Latin America and the Middle East. Funding is provided by multi and bi-lateral agencies, host governments, private corporations and individuals, and the communities served.

CARE's approach to water and sanitation activities reflects the organization's breadth of experience. During the 1960s, CARE focused on the provision of water supply hardware to poor rural communities in the developing world. As experience grew over the next forty years, the focus of activities gradually shifted from supply-driven provision of pumps and pipes to approaches driven by demand. These included working with households, communities and local organizations (both governmental and non-governmental) to increase sustainable access to safe water, promote sanitation, and improve hygiene behavior. Most recently, the emphasis has been on integrating water and sanitation activities with watershed management and productive uses of water such as micro-irrigation, and supporting local people and institutions in the integrated management of water resources at the local level. Although 75 percent of CARE's water projects are rural, CARE has undertaken an increasing number of urban projects in the last decade. These include water supply, drainage, sanitation, and solid waste management.

2. THE GLOBAL WATER CRISIS

In the coming decades, access to water may become a more critical problem than access to food, primary health care or education.

2.1 Overview

The world faces severe challenges to meet the growing demand for water and at the same time maintaining water quality. New sources of water are increasingly expensive to exploit, potentially restricting new water supplies to the better-off. In many developing countries agricultural water consumption far exceeds domestic and industrial use. As populations grow, increasing agricultural demand competes with demand from urban areas and industry and threatens supplies to important wetland ecosystems.

It is estimated that 2.7 billion people living in the developing world will experience severe water scarcity[1] by 2025. The bulk of this population will be in seventeen food-scarce countries of the semi-arid regions of Asia and sub-Saharan Africa. In rain-fed arid agricultural areas, including large parts of sub-Saharan Africa, China, the Indian sub-continent, Southeast Asia, the Middle East and parts of Latin America, water scarcity during prolonged dry seasons constitutes a serious challenge to the very subsistence of large populations. Over-exploitation of groundwater, particularly through its inefficient and over use, also poses a major threat to food security, environment and health. This threat involves the draw down of freshwater aquifers due to indiscriminate mining of groundwater on the one hand and rising water tables of saline water resulting from over-irrigation on the other.

A new politics of scarcity is emerging as rural areas, cities, regions, and neighboring countries compete for a limited and shrinking supply. Conflict over water has the potential to develop both between and within countries, between regions within a country, between communities and within populations in a community. Of the three principal forces that create scarcity and its potential to incite conflict or dispute – the depletion or degradation of the resource, population growth and unequal distribution or access – it appears that unequal distribution or access often plays the most important role.

The global water crisis is not just about water as a resource for economic welfare; it is also about public health. Domestic water supplies are increasingly threatened by pollution from industrial waste, untreated sewage, and chemicals in agricultural runoff. More than one billion poor people lack access to safe drinking water. About 2.6 billion do not have access to adequate sanitation and are forced to live in degrading and unhealthy environments. An estimated 2.1 million people, mostly children under five, die every year from preventable water-related diseases. Women and children, who are often the most vulnerable members of society, suffer most when access is poor or lacking.

Unsafe water and inadequate sanitation significantly increase the burden of disease among immune-compromised populations and undermine progress in treatment and care. HIV/AIDS patients suffer frequent debilitating bouts of diarrhea, and caregivers struggle to maintain hygienic conditions without water and sanitation. Using contaminated water to take with drugs or to mix feeds for children increases the risk of diarrhea and disease.

[1] Water scarcity is defined as annual renewable water resources of less than 1,000 m^3 per capita.

In many societies, women and children are responsible for collecting water. This can involve several hours of arduous work each day walking to and from distant water points; reduce the time available for childcare, household and productive activities; and prevent children[2] from attending school. It also potentially increases women and girls' exposure to sexual harassment, rape and contracting HIV. Lack of sanitation may also subject women to harassment when they seek privacy on the outskirts of the village or town to defecate and limit the times when they can defecate.

Anecdotal evidence suggests that many of the schools in the world, perhaps as many as half, do not have safe water, adequate sanitation and hygiene education. Infrastructure must be accompanied by improved hygiene if the transmission of disease is to be prevented. In addition, safe and separate sanitation for girls, particularly adolescents, is an important factor in maintaining and increasing school attendance by girls. There is also evidence that suggests that learning and attention span decline when pupils are dehydrated.

War and conflict often destroys not only community infrastructure and livelihoods, but also social capital and trust. Programming conducted in highly sensitive, volatile post-war contexts can fall victim to disorganization, distrust and resistance from members of the community. However, implementing water and sanitation programs in such an unstable environment can actually present a unique opportunity to rebuild a solid and sustainable foundation of community infrastructure, involvement, trust and peace.

Poor people themselves consistently place lack of water as one of their main poverty indicators and give it first priority in their own visions of the future. This is because the poor, particularly rural populations, continue to be the most vulnerable to changes in water availability and are the least able to cope with variations. They are at grave risk if there is a failure to find solutions to water management and environmental sanitation. An effective way of ensuring their right to water, through addressing the risks and uncertainties they face over access, is essential. Without it, their capacity to achieve long-term livelihood security, including a healthy and secure living environment, and escape poverty is substantially reduced.

2.2 Current trends

Statistics on water and sanitation are produced by the Joint Monitoring Program of the World Health Organization (WHO) and the United Nations Children Fund (UNICEF) based on data reported by 152 countries. Table 1 combines the results for the 40 most populous countries in Africa, Asia and Latin America, and compares the results in 1970, 1980, 1990 and 2002.

Table 1. Drinking water and sanitation coverage (percent) for Africa, Asia and Latin America combined, subdivided into urban and rural (1970-2002)

Year	1970	1980	1990	2002

[2] In Tanzania, 12 percent more children were found to attend school when safe water was available within 15 minutes rather than one hour from their home.

Urban water	65	74	82	95
Rural water	13	33	50	72
Urban sanitation	54	50	67	81
Rural sanitation	9	13	20	37

The table shows a pattern of steady progress over the last three decades, but there is still a huge task ahead because many people remain without services.

2.3 Water Coverage

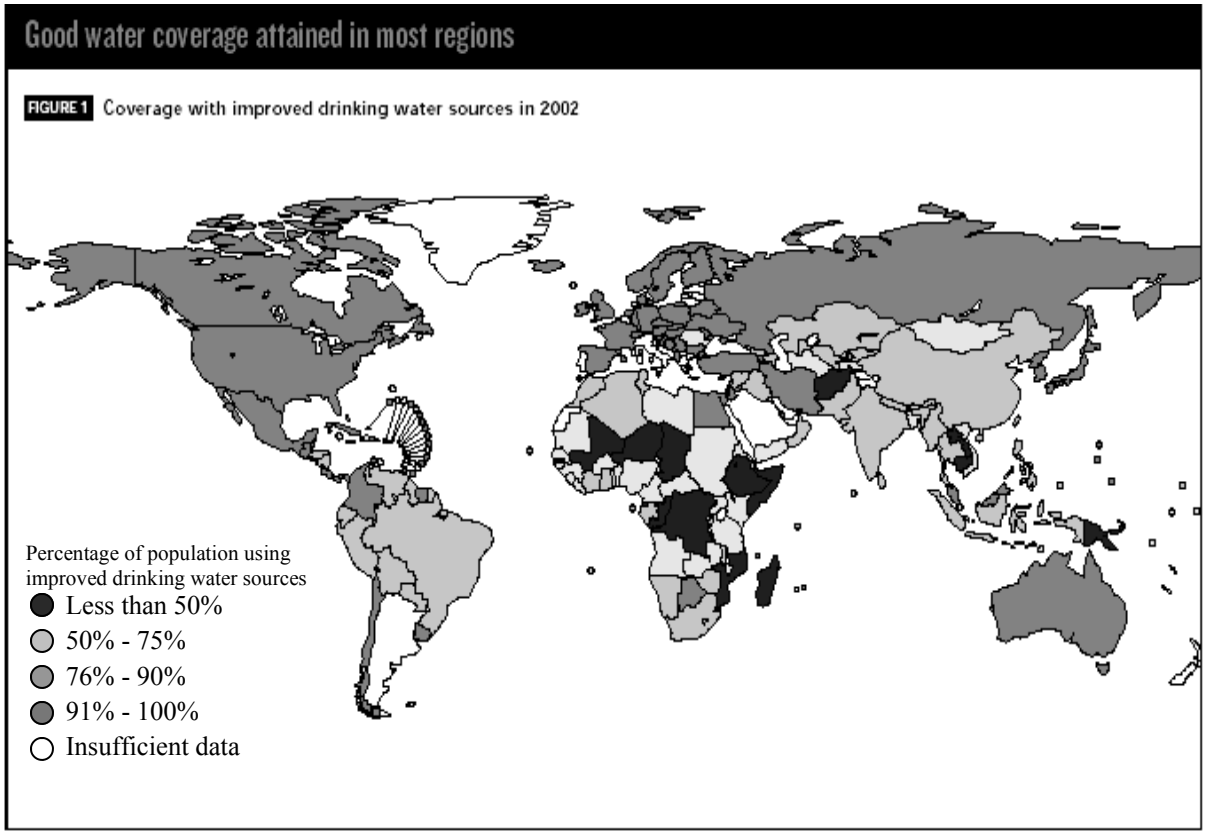
There has been some progress in global water provision, and some countries have the potential to meet the Millennium Development Goal (MDG) of halving the proportion of people without access to an improved water source between 1990 and 2015. Indeed, the percentage of people in the world with access to an improved water source rose from 77 percent in 1990 to 83 percent in 2002. However, the situation is particularly troubling in Sub-Saharan Africa where over 287 million people are without access, only 55 percent of rural residents have access, and 13 countries are lagging behind and need major external assistance to get back on target.

Africa is one of the fastest urbanizing regions due to drought, conflict and loss of jobs in rural areas. However, the vast majority of the population is still located in hard-to-reach rural areas where 45 percent of the population does not have access to an improved water source. This is an average figure and hides countries like Ethiopia where less than 20 percent of the rural population has access.

In South Asia and East Asia, the gross number of people without access to improved sources is comparable to Africa, but the percentage without access is much smaller because of the larger populations involved. Sub-Saharan Africa is also more dependent on outside aid than countries such as India where 90-95 percent of investment in the water sector comes from the government and internal sources.

Table 2: Access to improved water sources subdivided by region, 2002 (in millions)[3]

Region	Total Population	Served (%)	Unserved
Sub-Saharan Africa	685	397 (58)	287
South Asia	1,480	1,245 (84)	234
Southeast Asia	535	421 (79)	114
East Asia	1,374	1,071 (78)	302
Latin America	536	475 (89)	60
World-wide Total	6,225	5,149 (83)	1,075



Source: Meeting the MDG Drinking Water and Sanitation Target. A Midterm Assessment of Progress, United Nations, 2004

As can be seen from the above map, the vast majority of countries with less than 75 percent coverage are located in Sub-Saharan Africa.

2.4 Sanitation coverage: a world-wide problem

The figures for sanitation are worse than those for water in almost all regions. Sanitation coverage has increased more slowly, and the numbers without access are much larger. Two billion of the 2.6 billion people lacking adequate sanitation live in Asia. In India, for example, where major improvements have been achieved in water supply, less than 31 percent of the

[3] WHO/UNICEF Joint Monitoring Program for Water Supply and Sanitation, 2005.

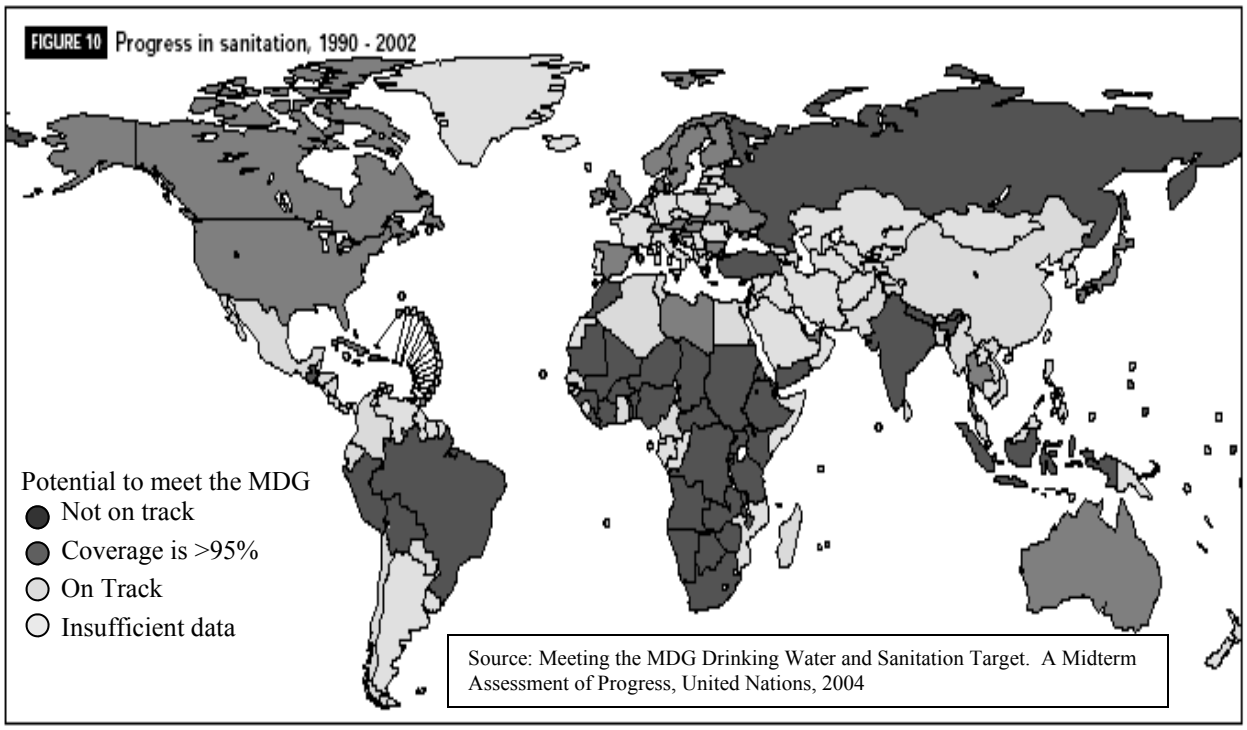
population has adequate sanitation. Among those countries with the 27 lowest rates of coverage – those in which no more than one third of residents have access to improved sanitation – 18 are in Sub-Saharan Africa and eight in Asia.

Sanitation coverage has only improved by a modest nine percent over the past 10 years. Improving access to sanitation is particularly challenging and the current advances will not be enough to achieve the goal set at the World Summit on Sustainable Development (WSSD) in Johannesburg of halving the proportion of people without access to improved sanitation between 1990 and 2015. Compared to water interventions, we know much less about successful sanitation programs. Access to sanitation in rural areas is half that of urban areas, and over 2 billion people without access live in rural areas.

Table 3: Sanitation coverage subdivided by region, 2002 (in millions)

Region	Total Population	Served (%)	Unserved
Sub-Saharan Africa	685	248 (36)	436
South Asia	1,480	539 (31)	941
Southeast Asia	535	328 (61)	207
East Asia	1,374	626 (45)	749
Latin America	536	399 (75)	136
World-wide Total	6,225	3,606 (58)	2,618

Sanitation is a worldwide problem. According to the United Nations Midterm Assessment, five regions (Eurasia, Oceana, South Asia, Sub-Saharan Africa, and Western Asia) are not on track to meet the WSSD Goal.



2.5 Sector Performance

The performance of the water and sanitation sector in delivering sustainable water and sanitation services remains inadequate when measured against the internationally agreed targets. Why should this be so? A recent 14 country study[4] identified seven key "concerns".

Prioritization. There are two compelling reasons for prioritizing water and sanitation. When poor people have a voice, access to safe water is very often their top priority. This proved to be the case recently in Ethiopia when USAID asked communities to prioritize amongst a range of child survival interventions. The second reason is that people cannot escape poverty without safe water and sanitation. The WHO has estimated that $84 billion worth of benefits are being lost annually in the developing world because of the failure to meet the MDG targets for water and sanitation[5]. However, very few developing countries prioritize water and sanitation in their planning and budgeting processes[6], and official development assistance for water supply and sanitation projects from the OECD countries and the major international financial institutions declined from a peak of $3.9 billion in 1995 to $1.5 billion in 2002 before rising to $2.7 billion in 2003.

Transparency. There is a shortage of data on how and to what extent developing country governments use their water and sanitation budgets. This makes it difficult to analyze what is happening in the sector in order to expose inefficiency and inequity, and tackle vested interests that prevent money from being used for the unserved and underserved.

Equity. Water sector aid from the OECD countries has been channeled to relatively few countries. From 1997-2001, the ten largest recipients received 48 percent of the total (although this was reduced from over 60 percent during 1995-96). China, India, Vietnam, Peru, Morocco and Egypt were among the top ten in both periods, with Turkey, Indonesia, Tunisia and Sri Lanka slipping out of the top ten to be replaced by Mexico, Malaysia, Jordan and the Palestinian administered territories in the second period. In 2001-2002, only 12 percent of the total aid to the water sector went to countries where less than 60 percent of the population had access to an improved water source, a group which includes most of the least developed countries[7]. A similar pattern of discrimination against the very poor can occur within countries where middle class urban inhabitants benefit at the expense of slum dwellers and people in rural areas. Piped systems can, for example, require user contributions that are beyond the means of the poor.

Sector coordination. "Overlapping water and sanitation projects along with multiple funding and reporting systems results in inequalities and confusion. The lack of sector coordination frequently manifests itself in the variety of technology and equipment used in projects and different, often contradictory, operational practices leading to poor sustainability of water supply systems." [8] For example, a rural water and sanitation project in Mozambique had to convince the provincial governor to intervene when another agency distributed free and subsidized spare parts

[4] "Getting to boiling point: Turning up the heat on water and sanitation", WaterAid, 2005.
[5] Hutton G & Haller L. "The Costs and Benefits of Water and Sanitation Improvements at the Global Level", WHO, 2004.
[6] A scorecard assessment of developing country and donor progress, CARE, Oxfam, WaterAid et al, 2004.
[7] A scorecard assessment of developing country and donor progress, CARE, Oxfam, WaterAid et al, 2004.
[8] "Getting to boiling point: Turning up the heat on water and sanitation", WaterAid, 2005.

that threatened the viability of a private sector supply chain. Once the subsidized spare parts were off the market, a sustainable supply of spare parts was achieved and availability increased.

Capacity. Many developing countries are decentralizing and devolving responsibility for water and sanitation to the district level. In theory, this is a positive step as it puts responsibility for water and sanitation at a level of government that is more approachable and accountable to the users. In practice, district government often has neither the financial resources nor the skilled staff to carry out its responsibilities. This is particularly true in remote locations where housing, schools and public services are poor or non-existent, and qualified government staff members are unwilling to serve. Bureaucracy and lack of capacity are proving to be bottlenecks in a number of countries and result in major delays in expenditure.

Privatization. The major international water companies have shown little interest recently in the traditional privatization models often proposed as a condition for a loan or credit. The high level of risk involved with these contracts and the weak regulatory environments have dissuaded most bidders. For example, German multinational RWE Thames has stated that they do not wish to see forced private sector involvement. Other approaches are beginning to show some success: a public-private partnership in Uganda is introducing effective competition alongside the organizational and political changes necessary for efficient utility operation.

The small-scale local private sector plays an extensive role in constructing water and sanitation facilities, and can also provide hygiene education, promote sanitation, and train communities in operation and maintenance. The small-scale private sector is sometimes the only source of water for poor communities although the poor can pay a high price for this service, particularly in peri-urban communities that do not have access to municipal facilities.

A more sensitive, context driven approach to privatization is required.

Expenditure and aid. Traditional thinking suggests that large investments for centralized infrastructure with per capita costs of several hundred dollars are required. While large investments are needed in urban centers in developing countries, appropriate technology and lower levels of service can be used to significantly reduce per capita costs. In rural areas, investments of $30-50 per capita are adequate for water supply, hygiene education and sanitation particularly where communities play a role in sourcing local materials and constructing the facilities.

Calculating the financing gap between the resources available to a country and what is needed to achieve the Millennium Development Goals for water and sanitation is a two-stage process. First, one must analyze sector efficiency, i.e. what resources are actually available and are they being used efficiently. And second, one must assess the amount of additional resources required at a realistic per capita rate. The latest UN calculations[9] suggest that aid for water and sanitation needs to more than double in 2006 to $7 billion to increase the total annual investment to more than $30 billion.

[9] Investing in Development, UN Millennium Project, 2005.

3. THE ROLE OF NON-GOVERNMENTAL ORGANIZATIONS

There is a broad range of NGOs that address water-related issues. Some are concerned with implementation, others engage in advocacy, and yet others undertake both. CARE is part of the last group and I can best explain what we consider to be the role of a NGO in the water sector by describing our water strategy.

Within CARE, we use the opportunities water programming presents to address not only the human condition through access to basic services but also the underlying causes of poverty such as poor governance, inequitable distribution of resources and social exclusion based on gender, class and ethnicity.

Our goal embodies the elements of water security (equitable access, efficient use and sustainable management):

"To enhance the livelihood security of poor rural and urban communities through equitable access, efficient use and sustainable management of limited and dwindling water resources".

This goal reflects CARE's commitment to serve individuals and families in the poorest communities in the world, but it also requires work at national and international levels, a range of interventions, and multiple partners including the private sector. Through a process of analysis, we identified five strategic objectives[10] and four intermediate objectives that contribute to our strategic goal and form a framework for our water programming. The four objectives are to:

#1. Increase our capacity to promote and provide quality services in water, hygiene and sanitation, and within agriculture and natural resource programming.
While CARE cannot hope to directly satisfy the enormous needs of those who lack basic services, our involvement in facilitating service provision is important. In addition to making a direct contribution to a substantial number of communities, the implementation of sustainable projects that are replicable elsewhere provides opportunities for innovation and learning lessons, and builds credibility and relationships for undertaking advocacy.

#2. Strengthen the capacity of stakeholders, particularly at the local level, to fulfill their roles and responsibilities in the sector.
CARE assists communities and local governments to define their rights, roles and responsibilities within an institutional framework for participatory planning and management. Securing the rights of communities to water is an important part of this process. Particular attention is paid to the needs, roles and skills of women as critical planners and users of water and sanitation systems, and as monitors of water resources.

[10] The strategic objectives are increased sector investment, well-informed public participation, inclusion of stakeholder concerns and practices in policy and planning, full sharing and use of expertise and experiences, and decentralized and holistic management of water.

#3. Build a broad-based constituency to advocate for the rights and needs of people to access water for health and productivity.
This is not just about building a constituency that is aware and supportive of water-related issues, but about helping people see the world, and their place in it, in a different way. Helping poor people gain access to water and sanitation is not just a moral obligation, it contributes to security and prosperity in an increasingly inter-connected international environment.

#4. Develop strategic partnerships and alliances with international organizations, governments, academia, non-governmental organizations, communities and the private sector.
CARE recognizes that building relationships with partners with skills and experience that complement CARE's expertise is imperative to broadening program impact. CARE also develops partnerships with the communities it serves and with local organizations that share CARE's vision and values. CARE seeks ways to ensure that power and accountability are shared, to facilitate consensus on sectoral issues, and to build the capacity of partners. Such processes are critical where a range of actors must collaborate in project design and implementation.

4. H.R. 1973 - THE "WATER FOR THE POOR ACT OF 2005"

Global access to water and sanitation has most recently been addressed at a series of meetings held by both the State Department and the Aspen Institute, bringing together government agencies, corporations, foundations, and non-governmental agencies with an interest in water. These meetings provided a forum to share information and lessons learned, and set the stage for the development of a broad consensus on potential roles for different U.S. actors, which has never existed before.

Leaders in Congress have propelled the issue forward with the introduction of H.R. 1973, the "Water for the Poor Act of 2005", and a complementary bill in the Senate, S. 492, the "Safe Water: Currency for Peace Act of 2005". Both bills establish access to water and sanitation as a priority in the fight against global poverty, require the development of a strategy, which addresses some of the outstanding gaps expressed earlier in this testimony, and provide an opportunity for the U.S. Government to further define its role in this important arena.

Moving forward, my main concern is that the sums appropriated in fiscal year 2006 and subsequent years are adequate to carry out the provisions and activities outlined in both pieces of legislation. I would also highlight the importance of determining appropriate financing mechanisms – whether it be grants, loans, investment insurance or loan guarantees – to address water and sanitation needs. For example, in peri-urban and rural areas, where the use of loans for water and sanitation is in its infancy, grants are typically a more effective financing mechanism.

5. CONCLUSION

The U.S. affirmed its commitment to improving access to water and sanitation worldwide at the 2002 World Summit on Sustainable Development. Now is the time to realize that commitment.

Greater international assistance and cooperation is needed to reach the internationally agreed upon goals of reducing by half the proportion of people without safe drinking water and basic sanitation by 2015. H.R. 1973, the "Water for the Poor Act of 2005" and its counterpart in the Senate are important steps forward.

Thank you again for the opportunity to testify before this Committee and to Chairman Hyde for raising the profile of this issue. I would also like to extend special thanks to Representatives Earl Blumenauer, Jim Leach, E. Clay Shaw, Jr., and Tom Lantos, who spearheaded efforts to develop this important piece of legislation. I look forward to working with the Committee to advance H.R. 1973, a critical tool that will help promote affordable and equitable access to water and sanitation for the world's poor.